

PIGEON HUSBANDRY

INTRODUCTION

Please note that this information is intended primarily for members of the genera *Columba* (includes common pigeon or rock dove and all breeds thereof), *Streptopelia* (ring-necked and related doves), and *Geopelia* (diamond and related doves).

General Information

The bird order Columbiformes contains as many as 316 species in 10 families and subfamilies. There are some species that are currently threatened or endangered and some species have become extinct during the past few centuries (including the dodo bird). Although Columbids share distinct physical features with each other there is still quite a bit of diversity within this group of birds. Some Columbids are tropical forest dwellers subsisting on insects and fruit for a large part of the diet whereas our more familiar species are primarily granivorous (eating seeds and grains). Some species are more similar to pheasants than to our classic idea of a pigeon (e.g., the common pigeon or rock dove). Common pigeons (domestic pigeons) usually lay 2 plain white eggs and incubate them for about 18 days. They are prolific breeders and can nest year-round if food is available. The nest is a loose collection of straw or sticks on a ledge or, for some species, on a tree limb.

Pigeons are unique in the avian kingdom in that they produce crop milk for their young; the nutritional composition of crop milk is similar to mammalian milk but it is made in the crop of both the male and female parents.

Pigeons have been kept as domesticated species for at least 5,000 years (possibly much longer); the common classifications of domesticated pigeons are flying/sporting pigeons, fancy pigeons, and utility (meat) pigeons, and many are kept as pets. In captivity, the lifespan of commonly kept dove and pigeon species is 10-15 years, though occasionally they will live to be 20 years old.

Just as with dogs and cats, domestic pigeons and doves need homes and there are a great many available to adopt through the growing rescue community. (See www.PigeonRescue.org for more info.)



Pet pigeons nest building and sitting on fake eggs.
Photo credit: Elizabeth Young.

Diet

Our most common species of pigeons and doves should be fed a seed and grain mix appropriate for the size of the bird. This can be supplemented with formulated pigeon pellets or small parrot pellets. Because Columbids swallow their food whole, they rely on powerful gizzard contractions to grind their food. There is debate about whether grit in the gizzard is needed to help grind the food. Too much grit can cause impaction; thus, grit, especially insoluble grit, should be offered sparingly. Soluble grit can also serve as a good calcium source, especially for growing and laying birds. Oyster shell and vitamin/mineral supplements (such as Lafeber, Nekkton, and Kaytee) can be used to balance the diet. Fruits, such as berries, may be offered as well. Greens and vegetables can be provided for variety although many captive birds may ignore them.

The drinking habits of pigeons and doves are unusual. Rather than scooping up water in their beaks and letting it run down their throats, they keep their heads down and suck up water using their beaks like a straw. Make sure birds always have a clean water bowl from which to drink.



Domestic Ringneck dove pets eating veggies. Photo credit: Jill McMurchy



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Husbandry

Most pigeons and doves can be maintained outdoors if the climate is mild or moderate. A predator and rodent-proofed flight cage (see below) is recommended and the birds should also have an enclosure to escape wind and rain. A light bulb or ceramic bulb can be provided in the winter for particularly cold weather. Increased quantities of cracked corn, sunflower seed, or other higher fat-containing grain can also be helpful in cold weather to provide extra calories for maintaining body temperature. Ventilation is important within lofts, particularly with large flocks. Ventilation should include rafter openings to encourage dissipation of ammonia vapors from droppings and to encourage drying of fecal material. Use of straw, except within nest boxes, is discouraged as it provides a good medium for fungal growth. For indoor dove cages, plain newspaper is a great substrate and should be changed daily. For outdoor lofts, a cement floor or one of hardware cloth with cement pavers or marine grade plywood over it are recommended. The floor should be scraped cleaned on at least a weekly basis to maintain acceptable hygiene. Pigeons and doves are sensitive to mold in the environment so their cages should be kept as dry as possible.

Pigeon and dove cages should be long rather than tall so the birds can fly from perch to perch. A minimum recommended cage size for a single dove is 3' wide by 2' tall by 2' deep but the largest enclosure you can afford and fit in your environment is preferred; multiple pigeons will need an even larger cage. The more birds in the enclosure, the larger it needs to be. These are generally social birds so they do best with at least one friend, especially if housed outside; most Columbidae species mate for life and can become territorial during breeding season.

Since pigeons and doves spend most of their time on their feet, comfortable perching surfaces are a must! Pigeons and doves prefer flat shelves to branch-type perches; shelves are good for strutting, courting, lounging and napping. However, a natural branch perch or two should also be offered. With perches, the bird's foot will wrap around 2/3 to 3/4 of the perch if it is appropriately sized. At least 3 different perching options (both branches and shelves) will help reduce excessive pressure being placed on any one part of the foot. Please note that wire is not an appropriate perching surface.

Pigeons and doves produce powder down from special feathers on their sides. People who are regularly exposed to this powder down can be at risk for developing a serious allergic reaction to it. This is becoming a leading health problem for persons owning pigeons and other powder-down producing bird species. It is recommended you wear a mask when cleaning pigeon and dove enclosures. Birds kept indoors should preferably be housed



Rescued pigeons in indoor double flight cage.



*Rescued Ringneck doves in flight cage need safe out of cage time.
Photo credit: Elizabeth Young.*

in a room separate from where people sleep and with good ventilation or air filtration.

Routine bathing (at least once to twice weekly) is usually enjoyed by pigeons and doves and also helps to keep their feathers healthy. Try a shallow pan filled with lukewarm water or a fine mist from a spray bottle or misting system.

A nest box must be offered to breeding pigeons and doves; however, pet pigeons enjoy having the option of somewhere private to rest. One easy option is a 12 x 12 x 12-inch nest box for chickens available at most feed stores. How to breed pigeons is beyond the scope of this handout but there are many resources available online on this topic, some of which are provided below. Since pigeons and doves prefer to live with a mate, egg laying is a common occurrence; real eggs can be replaced with fake eggs to prevent undesired offspring (see resources below for more information).

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Predator Proofing Outdoor Enclosures

Most cages are built to keep birds IN but don't always succeed in keeping predators and rodents OUT. Outdoor pigeons and doves attract predators such as cats, racoons, and raptors. To keep your birds safe, the enclosure should be sturdily built and entirely enclosed in 0.5" (1.25cm) hardware cloth all the way around (top, bottom, and sides); there should not be any gaps larger than 0.5" (1.25cm). Chicken wire will not be effective at keeping predators out and should never be used. Flooring and roofing can be constructed over the hardware cloth. The ceiling of the enclosure can be half solid roof for protection from the elements and half plain hardware cloth to allow access to sunshine and fresh air. Special attention needs to be paid to make sure doors are racoon proof.



*Predator and rodent proof aviary 8' x 8' x 8'.
Photo credit: Elizabeth Young.*



*Pigeons thrive year round in a safe aviary.
Photo credit: Gwenn Moore.*



*Rescued pigeon adopter Helen and aviary.
Photo credit: Elizabeth Young.*

Enrichment

All captive animals deserve enrichment opportunities, and doves and pigeons are no different. For indoor (especially solitary) birds, consider offering a mirror as many pet pigeons enjoy looking at themselves. Indoor birds enjoy spending time with their human family members; a centrally located cage will help them feel included in the human flock, though one side of the cage should be placed against a wall for a sense of security. Many birds will enjoy time outside of the cage with their human flock; pigeon "pants" (available online) can be used to prevent messes during their time out of the cage. Pigeons housed in an outdoor loft with other birds receive enrichment from spending time with their avian flockmates.

In the wild, pigeons and doves spend a considerable portion of their day foraging for food; captive birds can be provided with the same opportunity. Scattering some of their feed on the (clean) floor of the cage, on a tray, or on Astroturf placed on the cage floor is one easy way to encourage foraging behaviors.



Self recognizing pigeons enjoy mirrors.

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Pigeons used for sport such as racing, tumbling, and highflying will receive enrichment simply from training and competing. However, indoor pigeons and doves will also enjoy the opportunity for supervised flying time around their home as long as it can be done safely. Pet pigeons can be trained to do simple tricks such as coming when called, discriminating between three colors, and targeting an object with their beaks; training should be based on a food reward system using treats such as small pieces of peanut, millet, canary grass, wheat grass or cracked corn. Goodbirdinc.com has excellent training information geared towards parrots but the training technique works on pigeons and doves as well; you can see Barbara Heidenreich training feral pigeons in Central Park in this short YouTube video: <https://youtu.be/t5gGBI6OhkY>



Pet pigeon Shadow shows off pigeon pants. Photo credit: Jill McMurchy.

Medical Concerns

Whenever acquiring new birds for your flock, we encourage you to quarantine the new birds for at least 40 days in a separate enclosure. An examination, fecal evaluation, and, in some cases, bloodwork are recommended on new birds. Some potential pathogens in all Columbids include Psittacosis (*Chlamydia psittaci* infection), pigeon herpesvirus, trichomoniasis (also known as canker), paratyphoid (*Salmonella* infection), paramyxovirus (Newcastle) infection, poxvirus infection, adenovirus infection, intestinal parasites such as ascarids (roundworms), and external parasites such as feather mites and red mites. There are vaccines available in many countries against poxvirus, paratyphoid, and some strains of paramyxovirus; vaccines are usually recommended for flying/sporting pigeons rather than birds that are kept strictly as pets. Speak with your avian veterinarian to find out what vaccines, if any, are recommended for your birds.

Zoonoses (Diseases contagious to people)

- Psittacosis (*Chlamydia psittaci*)
- *Histoplasma* and *Cryptococcus* (fungi that prefer to grow in accumulated pigeon droppings)
- Allergic alveolitis (see above under husbandry)



Trichomoniasis in a pigeon. Photo credit: Dr. Nico Schoemaker.

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Pigeon nest.
Photo credit: Dr. Nico Schoemaker.



Inside pigeon loft.
Photo credit: Dr. Nico Schoemaker.



Spreading tail of heterozygote male pigeon.
Photo credit: Dr. Nico Schoemaker.

Summary

Pigeons and doves are fun and rewarding pets that do wonderfully in captivity as long as they are cared for appropriately. Remember that your avian veterinarian is there to help you determine how to keep your birds happy and healthy for years to come.

References for further reading

Good resource for examples of cages for indoor birds: <https://www.pigeonrescue.org/2015/09/30/is-this-a-good-cage/>

Information on adopting pigeons and doves as pets: <https://www.PigeonRescue.org>

For detailed information on replacing real eggs with dummy/fake eggs:
<https://www.pigeonrescue.org/faqs-2/how-to-replace-real-eggs-with-fakes-to-prevent-breeding/>

For more detailed information on how to build a safe outdoor aviary: <https://www.pigeonrescue.org/birds/creating-an-aviary/>

Good information on nest boxes for outdoor pigeon lofts: <http://www.drjohnlamberton.com/journey-nestboxes.htm>

Good general information article on pigeon lofts and pigeon breeding:
<https://extension.arizona.edu/sites/extension.arizona.edu/files/attachment/PigeonTalkDOC351.pdf>

Several articles on getting started in pigeon racing can be found here:
<https://americanracingpigeonunion.blogspot.com/2014/02/homing-pigeons-101.html>



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Avian medicine is a distinct and very specialized field that requires extensive training, advanced skills, and facilities specifically designed and equipped to treat and hospitalize birds. The Association of Avian Veterinarians was established to provide veterinarians with this special education, and to keep them up to date with the latest information on bird health. The AAV holds an annual conference on avian medicine and publishes the peer-reviewed *Journal of Avian Medicine and Surgery*. AAV also makes annual contributions toward avian conservation and sponsors studies advancing the understanding of avian medicine.

For More Information

For more information on birds, ask your veterinarian for copies of the following AAV Client Education Brochures:

- Avian Chlamydiosis and Psittacosis
- Veterinary Care for Your Pet Bird
- Basic Care for Companion Birds
- Behavior: Normal and Abnormal
- Caring for Backyard Chickens
- Caring for Ducks
- Digital Scales
- Feather Loss
- Feeding Birds
- Foraging for Parrots
- Injury Prevention and Emergency Care
- Managing Chronic Egg-laying in Your Pet Bird
- Signs of Illness in Companion Birds
- Ultraviolet Lighting for Companion Birds
- When Should I Take My Bird to a Veterinarian?
- Zoonotic Diseases in Backyard Poultry



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Rescued King pigeons in shelter awaiting adoption.
Photo credit: Elizabeth Young.

Online Resources

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Our website, www.aav.org, offers a Find-a-Vet tool to help pet bird owners locate avian veterinarians around the world. We also offer a variety of resources such as basic bird care instructions and more. Visit the website today!



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